

Work Order ID 111670

Friday, January 17, 2014 10:11:41 AM

111670

RFN 28/01
Ship ~~Monday~~ Page 1

Item ID: D2986-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Rubber Spacer
 Start Date: 1/17/2014 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 1/17/2014 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: mf Date: 14-1-16 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2986	Rev B

100	FLOW WATER JET	0.00							
100									
Waterjet	Memo	0.00							

FLOW CNC Waterjet
 1-Cut as per Dwg D2986
 Dwg Rev: B
 Prog Rev: B
 2-Deburr if necessary

4111 FORM

110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	0.00							
Quality Control	***template DT3187-1T1***								

Surf test results
POSITIVE RECALL
 EFFECTIVE 14-01-28 AUTH L
 RELEASED L DATE 14-01-28 E 14-1-28

120	QC8- Inspect parts - second check	0.00							
120									
QC	Memo	0.00							
Quality Control									

DAS
 27
 9-89
14/1/28 3

SECRET

SECRET

SECRET

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N900040100

Setup Start *NS1*

Stop ***NS2***

Start Date: 1/17/2014 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 1/17/2014 Req'd Qty: 2.00 **

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

**Insp.
Stamp**

Identify as per dwg & Stock Location: _____

0.00

130

Packaging

Memo

0.00

Packaging

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

3x 14-01-28

14/01/28

mk
14-1-28

Picklist Print

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Work Order ID: 111670

Parent Item: D2986-1

Parent Item Name: Rubber Spacer

Start Date: 1/17/2014

Required Date: 1/17/2014

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:B 09-01-20 rev.B as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M4111NS.125		Purchased	No			100	sf	211.5200	5.466	12			
4111 Black Neoprene/EPDM/SBR Blend Sheet 0.125"											<u>EL 14-28</u>		

Location

Loc Qty

Loc Code

MAT052

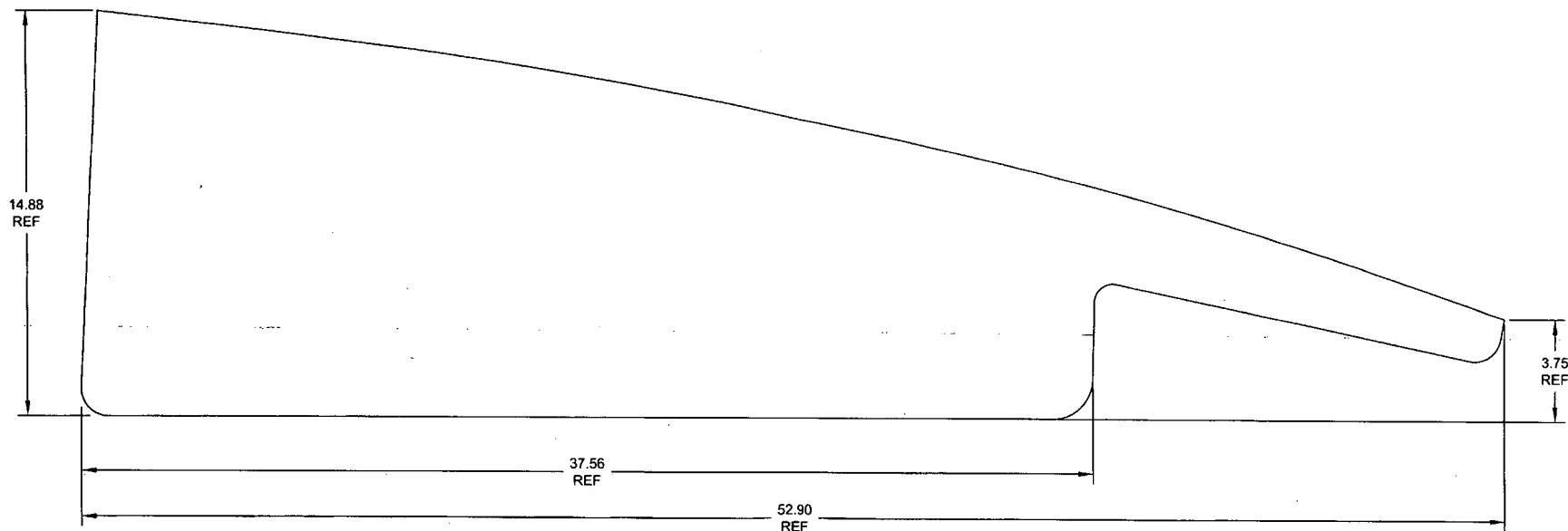
211.52

m127905

211.52

16

11670



D2986-1 RUBBER SPACER

RELEASED
09.01.08

NOTES:

- 1) MATERIAL: BLACK NEOPRENE/EPDM/SBR BLEND SHEET (ROLL), 0.125 THICK, PER ASTM D 1056 GRADE 2A1 OR SAE J-18 GRADE 2A1 (REF. DART SPEC. M-4111N-S.125)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.3 lbs
- 8) TOOLING: CUT PER TEMPLATE DT3187-1T1

B	REDRAWN TO CURRENT STANDARDS; TRANSFERRED TO B-SIZE FORMAT; ADDED PART DWG DETAIL; REVISED NOTE 1; REMOVED SUPPLIER AND SPEC DWG NOTES. REASON: ECN#08-589.		MB	08.12.18
A	NEW ISSUE		DS	00.09.26
REV.	DESCRIPTION		BY	DATE
DESIGN	DART AEROSPACE LTD			
DRAWN	HAWKESBURY, ONTARIO, CANADA			
CHECKED	DRAWING NO. D2986		REV. B	
MFG. APPR.			SHEET 1 OF 1	
APPROVED	TITLE		SCALE	
DE APPR.	RUBBER SPACER		NTS	
DATE	08.12.18		COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Linda Lacelle

From: Nigel Forbes
Sent: January-28-14 2:35 PM
To: Linda Lacelle
Subject: Fwd: Signed Burn Test Plan

FYI. Are we good to ship as scheduled?

Sent from my iPhone

Begin forwarded message:

From: Mike Petsche <mpetsche@dartaero.com>
Date: January 28, 2014 at 2:10:30 PM EST
To: David Shepherd <dshepherd@dartaero.com>, Chris Provencal <cprovencal@dartaero.com>
Cc: Patrick Smith <psmith@dartaero.com>, Bill Beckett <bbeckett@dartaero.com>, Nigel Forbes <nforbes@dartaero.com>
Subject: RE: Signed Burn Test Plan

All.....it passed the burn test

From: David Shepherd
Sent: Friday, January 24, 2014 10:21 AM
To: Chris Provencal
Cc: Mike Petsche; Patrick Smith; Bill Beckett
Subject: Signed Burn Test Plan

Chris,

Sorry for the delay in signing this.

The original version you sent me on Wednesday was just fine. Please make sure the word file is corrected to the version I just signed. The witnessing statement needs to be left in the Burn TP because this TP applies to ALL of the coupons that have been previously been burned, not just the latest ones. Technically, I am supposed to go to Toronto and witness every single burn test. However, at my discretion, I am allowed to delegate portions of the testing. Since I have witnessed the majority of the testing already, I am comfortable with letting Exova do this on their own, but I am fully responsible for it.

Assuming we pass the burn test, I assume you will update the applicable M-drawing for this???

Bill,

If we decide to change suppliers or part numbers on anything that is not metallic and gets installed inside a helicopter, it MAY be subject to a burn test. Generally speaking, we need a one month warning (not a one week warning) before you intend to incorporate that material into a production part in case we need to revise a TP and/or make arrangements for a burn test.

Regards,
David